

Amendments to the Claims:

Please amend the claims as follows:

1. (Currently Amended) A surgical headlight system attachable to a surgeon's head band or cap for illumination purposes comprising:

a headlight housing, said headlight housing including at least one LED light source and a fiber optic rod disposed directly adjacent to and abutting against said LED light source;

a lens assembly in direct optical communication with the output of said fiber optic rod;

a light path from said lens assembly in said headlight housing to emit light outside said headlight housing to a surgical area; and

an electrical power source that is variable for providing power to said LED light source connected to said LED light source.

2. (Previously Amended) The surgical headlight assembly as in claim 1, including:

means for attaching said headlight housing to a head band to be worn by a surgeon.

3. (Previously Amended) The surgical headlight assembly as in claim 1, including:

said LED light source being a white light source of approximately 5,500 kelvins, said LED light source being connected to a circuit board mounted in said headlight housing.

4. (Previously Amended) The surgical headlight assembly as in claim 1, including:

a mirror mounted in the light path from said lens assembly to the housing light outlet.

5. (Currently Amended) A compact headlight for surgery comprising:
a ~~small, lightweight~~ housing with an opening for emitting light;
an LED light source in direct physical contact with and abutting against a fiber optic rod that forms a direct light optical channel; and
a pair of collimating lenses in direct optical communication with said fiber optic rod;

wherein said elements LED light source, the pair of collimating lenses, and the fiber optic rod are all self-contained in said small housing;
a power source that is connected to the LED light source to provide power to said LED light source.

6. (Previously Added) The surgical headlight assembly as in claim 1, wherein said fiber optic rod comprises a bundle or bundles of a plurality of fiber optic strands.

7. (Previously Added) The compact headlight of claim 6, wherein said fiber optic rod includes:

a distal end serving as an output of light from the LED light source; and
a proximal end that is a hemispherical concave shape.

8. (Previously Added) The surgical headlight assembly as in claim 1, wherein said lens assembly comprises one or more collimating lenses.

9. (Previously Added) The surgical headlight assembly as in claim 1, wherein said lens assembly comprises a first collimating lens and a second collimating lens.

10. (Previously Added) The surgical headlight assembly as in claim 9, wherein the first collimating lens is in direct physical contact with a distal end and output of said fiber optic rod so that the distal end of said fiber optic rod abuts against said first collimating lens.

11. (Previously Added) The surgical headlight assembly as in claim 7, wherein the hemispherical concave shape of a proximal end of the fiber optic rod covers the surface of the LED light source so that each fiber optic strand can transmit the maximum amount of light from said LED to a distal opening of the headlight housing.

12. (Previously Added) The surgical headlight assembly as in claim 5, wherein said fiber optic rod comprises a bundle or bundles of a plurality of fiber optic strands.

13. (Previously Added) The compact headlight of claim 12, wherein said fiber optic rod includes:

a distal end serving as an output of light from the LED light source; and
a proximal end that is a hemispherical concave shape.

14. (Cancelled)

15. (Currently Amended) The surgical headlight assembly as in claim [[14]] 5, wherein the first collimating lens is in direct physical contact with the distal end and output of said fiber optic rod so that the distal end of said fiber optic rod abuts against one side of said first collimating lens.

16. (Previously Added) The surgical headlight assembly as in claim 13,

wherein the hemispherical concave shape of the proximal end of the fiber optic rod is covers the surface of the LED light source so that each fiber optic strand can transmit the maximum amount of light from said LED to a distal opening of the lightweight housing.

17. (New) The surgical headlight assembly as in claim 5, wherein the power source is variable.